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Ser	Ser	Thr	Leu	Thr	Leu	Ser	Lys	Ala	Asp	Tyr	Glu	Lys	His	Lys	Val
			180					185					190		
Tyr	Ala	Cys	Glu	Val	Thr	His	Gln	Gly	Leu	Ser	Ser	Pro	Val	Thr	Lys
		195					200					205			
Ser	Phe	Asn	Arg	Gly	Glu	Cys									
	210				215										

What is claimed is:

1. A pharmaceutical formulation comprising: (i) an anti-human Activin A antibody, or antigen-binding portion thereof; (ii) a buffer at pH of 6.3 ± 0.3 ; (iii) an organic cosolvent; and (iv) one or more thermal stabilizers.

2. The pharmaceutical formulation of claim 1, wherein the antibody, or the antigen-binding portion thereof, comprises the following six CDR sequences:

- (a) an HCDR1 having the sequence GGSFSSHF (SEQ ID NO.: 1);
- (b) an HCDR2 having the sequence ILYTGGT (SEQ ID NO.: 2);
- (c) an HCDR3 having the sequence ARA-RSGITFTGIIVPGSFDI (SEQ ID NO.: 3);
- (d) an LCDR1 having the sequence QSVSSSY (SEQ ID NO.: 4);
- (e) an LCDR2 having the sequence GAS (SEQ ID NO.: 5); and
- (f) an LCDR3 having the sequence QQYGSSPWT (SEQ ID NO.: 6).

3. The pharmaceutical formulation of claim 2, wherein the antibody has a molecular weight of about 145,235.3 Da.

4. The pharmaceutical formulation of claim 3, wherein the antibody, or the antigen-binding portion thereof, concentration is $60 \text{ mg/mL} \pm 6 \text{ mg/mL}$.

5. The pharmaceutical formulation of claim 1, wherein the buffer is a histidine buffer.

6. The pharmaceutical formulation of claim 5, wherein the histidine concentration is $10 \text{ mM} \pm 2 \text{ mM}$.

7. The pharmaceutical formulation of claim 1, wherein the organic cosolvent is polysorbate 20.

8. The pharmaceutical formulation of claim 7, wherein the polysorbate 20 concentration is $0.05\% \text{ w/v} \pm 0.025\%$.

9. The pharmaceutical formulation of claim 1, wherein the one or more thermal stabilizers comprise sucrose and arginine.

10. The pharmaceutical formulation of claim 9, wherein the sucrose concentration is $5\% \pm 1\% \text{ (w/v)}$ and the Arginine concentration is $70 \text{ mM} \pm 14 \text{ mM}$.

11. The pharmaceutical formulation of claim 1, comprising $60 \text{ mg/mL} \pm 6 \text{ mg/mL}$ antibody, $10 \text{ mM} \pm 2 \text{ mM}$ histidine, pH 6.3 ± 0.3 , $0.05\% \text{ w/v} \pm 0.025\%$ polysorbate 20, $5\% \text{ w/v} \pm 1\%$ sucrose, and $70 \text{ mM} \pm 14 \text{ mM}$ Arginine.

12. The pharmaceutical formulation of claim 2, wherein after 56 days of storage at 40°C . and 75% relative humidity (RH), at least 90% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 30% of the antibody, or the antigen-binding portion thereof, is the main charge form.

13. The pharmaceutical formulation of claim 2, wherein after 56 days of storage at 40°C . and 75% RH, at least 93% of the antibody, or the antigen-binding portion thereof, has

native conformation, or at least 34.5% of the antibody, or the antigen-binding portion thereof, is the main charge form.

14. The pharmaceutical formulation of claim 2, wherein after 56 days of storage at 40°C . and 75% RH, at least 97% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge form.

15. The pharmaceutical formulation of claim 2, wherein after six months of storage at 25°C . and 60% RH, at least 90% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 40% of the antibody, or the antigen-binding portion thereof, is the main charge form.

16. The pharmaceutical formulation of claim 2, wherein after six months of storage at 25°C . and 60% RH, at least 95% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge form.

17. The pharmaceutical formulation of claim 2, wherein after six months of storage at 25°C . and 60% RH, at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, or at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge form.

18. The pharmaceutical formulation claim 2, wherein after 12 months of storage at $2-8^\circ \text{C}$., at least 94% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

19. The pharmaceutical formulation claim 2, wherein after 12 months of storage at $2-8^\circ \text{C}$., at least 96% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 50% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

20. The pharmaceutical formulation claim 2, wherein after 12 months of storage at $2-8^\circ \text{C}$., at least 98% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 55% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or the antibody retains at least 100% of the potency of the antibody, or the antigen-binding portion thereof, prior to storage.

21. The pharmaceutical formulation claim 2, wherein after 18 months of storage at $2-8^\circ \text{C}$., at least 94% of the antibody, or the antigen-binding portion thereof, has native conformation, at least 45% of the antibody, or the antigen-binding portion thereof, is the main charge variant, and/or